Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A field emission display comprising:

at least a cathode electrode;

at least a carbon nanotube array having an end surface adapted for emission of electrons therefrom, each end surface being in electrical connection with a corresponding cathode electrode;

an anode electrode;

at least a gate electrode arranged between the at least a cathode electrode and the anode electrode;

a spacer adapted for insulating the at least a cathode electrode and the at least a gate electrode, the end surface of the carbon nanotube array being substantially flush with an end of the spacer; and[[;]]

an intermediate layer arranged between the gate electrode and the spacer.

Claim 2 (original): The filed emission display as described in claim 1, wherein a material of the spacer is selected from the group consisting of heatproof glass, metal coated with insulating material, silicon, silicon oxide, mica and ceramic material.

Claim 3 (original): The field emission display as described in claim 2,

wherein a height of the spacer is in the range from 1 micron to 10 mm.

Claim 4 (original): The field emission display as described in claim 1, wherein each carbon nanotube array is connected to the corresponding cathode electrode via a layer of negative feedback resistance, which is formed between the carbon nanotube array and the cathode electrode.

Claims 5-6 (canceled)

Claim 7 (original): A field emission display comprising:

at least a cathode electrode;

an anode electrode;

at least a gate electrode arranged between the cathode electrodes and the anode electrode;

at least a carbon anotube array, each electrically connected to a corresponding cathode electrode; and

a spacer insulatively separating the gate electrodes from the cathode electrodes;

wherein an end surface of each carbon nanotube array is flush with a top end of the spacer nearest the gate electrodes; and an intermediate layer having a predetermined thickness is arranged between the gate electrodes and the spacer.

Claim 8 (original): The field emission display as described in claim 7, wherein a material of the intermediate layer is selected from the group consisting of heatproof glass, metal coated with insulating material, silicon, silicon oxide, mica and ceramic material.

Claim 9 (original): The field emission display as described in claim 8, wherein a thickness of the intermediate layer is in the range from 1 micron to 1000 microns.

Claim 10 (original): The field emission display as described in claim 7, wherein a material of the spacer is selected from the group consisting of heatproof glass, metal coated with insulating material, silicon, silicon oxide, mica and ceramic material.

Claim 11 (original): The field emission display as described in claim 7, wherein a height of the spacer is in the range from 1 micron to 10 mm.

Claim 12 (original): The field emission display as described in claim 7, wherein each carbon nanotube array is connected to a corresponding cathode electrode via a layer of negative feedback resistance.

Claim 13 (original): The field emission display as described in claim 7, wherein a thin protective layer is arranged between the spacer and the intermediate layer.

Claim 14 (original): The field emission display as described in claim 13, wherein a thickness of the thin protective layer is in the range from 10 nanometers to 1 micron.

Claim 15 (original): The field emission display as described in claim 13, wherein a catalyst layer is arranged between the thin protective layer and the

spacer.

Claim 16 (original): The field emission display as described in claim 15, wherein a thickness of the catalyst layer is in the range from 1 nanometer to 10 nanometers.

Claim 17 (original): A field emission display comprising:

a cathode assembly;

a carbon nanotube array having a first end in electrical connection with the cathode assembly and a second end which is substantially planar;

a support member arranged adjacent the carbon nanotube array;

a gate electrode positioned on the support member; and

a phosphor screen assembly having an anode electrode facing the carbon nanotube array;

wherein the support member comprises an insulative spacer and an intermediate layer on a top of the insulative spacer, each of which having a predetermined thickness, and the second end of the carbon nanotube array is flush with a top end of the spacer.

Claim 18 (original): The field emission display as described in claim 17, wherein the cathode assembly comprises a layer of negative feedback resistance.

Claim 19 (original): The field emission display as described in claim 17, wherein a flatness of the carbon nanotube array is less than 1 micron.

Claim 20 (original): The field emission display as described in claim 17,

wherein the phosphor screen assembly comprises a phosphor layer.

Claim 21 (original): The field emission display as described in claim 17, wherein the thickness of the intermediate layer is in the range from 1 micron to 1000 microns.

Claim 22 (original): The field emission display as described in claim 17, wherein the support member further comprises a protective layer between the insulative spacer and the intermediate layer.

Claim 23 (original): The field emission display as described in claim 22, wherein a thickness of the protective layer is in the range from 10 nanometers to 1 micron.

Claims 24-26 (canceled)

Claim 27 (previously presented): The field emission display as described in claim 1, wherein a thickness of the intermediate layer is in the range from 1 micron to 1000 microns.